

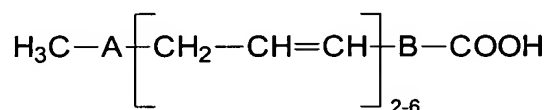
# CLAIMS

1. A glass yarn, in particular a staple glass yarn, coated with a sizing composition consisting of a solution comprising at least one fatty acid containing at least two ethylene bonds.

2. The glass yarn as claimed in claim 1, characterized in that the fatty acid contains 10 to 24, preferably 14 to 22, carbon atoms.

3. The glass yarn as claimed in either of claims 1 and 2, characterized in that the fatty acid is chosen from linear-chain fatty acids.

4. The glass yarn as claimed in claim 3, characterized in that the fatty acid satisfies the following formula:



in which A and B represent a hydrocarbon chain and the total number of carbon atoms in the chains A and B varies from 2 to 16.

5. The glass yarn as claimed in claim 4, characterized in that the acid contains 18 to 22 carbon atoms and satisfies the above formula in which:

A =  $\text{---}(\text{CH}_2)_x\text{---}$ , x being an integer varying from 0 to 6, preferably equal to 0, 3 or 6,

B =  $\text{---}(\text{CH}_2)_y\text{---}$ , y being an integer varying from 2 to 11.

6. The glass yarn as claimed in one of claims 1 to 5, characterized in that the composition furthermore comprises at least one polymer carrying one or more hydroxyl, epoxy and/or amine reactive functional groups.

7. The glass yarn as claimed in claim 6, characterized in that the polymer has a molecular mass of at least 300 and preferably less than 3000.

8. The glass yarn as claimed in either of claims 6 and 7, characterized in that the polymer is a hydroxyl-terminated or amine-terminated polybutadiene.

9. The glass yarn as claimed in one of claims 1 to 8, characterized in that the fatty acid content is greater than or equal to 5%, preferably greater than or equal to 8%, by weight of the composition.

10. The glass yarn as claimed in one of claims 6 to 8, characterized in that the polymer content represents up to 40%, preferably 5 to 30% and advantageously 8 to 25%, by weight of the composition.

11. The glass yarn as claimed in one of claims 1 to 10, characterized in that the sizing composition furthermore includes at least one solvent in a proportion of between 0 and 30% by weight of the composition.

12. The glass yarn as claimed in one of claims 1 to 11, characterized in that  
5 the composition furthermore includes at least one coupling agent in a proportion of between 0 and 20% by weight.

13. The glass yarn as claimed in one of claims 1 to 12, characterized in that the composition includes at least one textile processing aid in a proportion from 0 to 40%.

10 14. A sizing composition for glass yarn, in particular a staple glass yarn, consisting of a solution containing less than 5% water and comprising at least one fatty acid containing at least two ethylene bonds.

15 15. The composition as claimed in claim 14, characterized in that it has a viscosity of less than  $120 \times 10^{-3}$  Pa.s, preferably between 50 and  $100 \times 10^{-3}$  Pa.s.

16. The composition as claimed in either of claims 14 and 15, characterized in that the fatty acid content is greater than or equal to 5%, preferably greater than or equal to 8%, by weight of the composition.

17. The composition as claimed in one of claims 14 to 16, characterized in that it furthermore includes at least one polymer carrying one or more hydroxyl,  
20 epoxy and/or amine reactive functional groups.

18. The composition as claimed in claim 17, characterized in that it includes a mixture of linoleic acid and of hydroxyl-terminated polybutadiene.

19. A process for manufacturing sized glass yarns, especially sized staple glass yarns, in which a mass of molten glass streams flowing from a mass of  
25 orifices are drawn and wound in the form of a web on a rotating roll located more or less vertically beneath the bushing, the web is separated from the roll and the filaments chopped by means of a blade and said filaments are gathered together to form a staple glass yarn, said process consisting in depositing a sizing composition as claimed in one of claims 14 to 18 on the surface of the filaments  
30 before they come into contact with the roll.

20. The process as claimed in claim 19, characterized in that the sizing composition is deposited by spraying.

21. The use of the yarn as claimed in one of claims 1 to 13 to form a fabric, especially a paint canvas.

22. A glass fabric, characterized in that it comprises a staple glass yarn as claimed in one of claims 1 to 13 and in that said staple glass yarn has a tenacity of greater than 4 cN/ tex, preferably greater than 7.5 cN/tex.